

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-23 are presently pending in this case, Claims 10, 11, 13, 14, and 19 having been amended by way of the present Amendment. Claims 8 and 22 have been withdrawn from consideration; however, the Applicants note that these claims should be rejoined upon allowance of their respective linking claim. Care has been taken such that no new matter has been added by the amendments set forth herein. (See, e.g., page 20, lines 10-15, and Figures 2 and 3.)

Claims 1-7 and 9 have been allowed, and Claim 19 was indicated as containing allowable subject matter.

In the outstanding Official Action, Claims 10, 14-18, 20, 21, and 23 were rejected under 35 U.S.C. 102(b) as being anticipated by Miller (U.S. Patent No. 5,417,537). For the reasons discussed below, the Applicants request the withdrawal of the anticipation rejection.

In the Office Action, the Miller reference is indicated as anticipating independent Claims 10 and 14. However, the Applicants note that a claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. As will be demonstrated below, the Miller reference clearly does not meet each and every limitation of independent Claims 10 and 14.

Independent Claims 10 and 14 each advantageously recite a transfer mechanism comprising, among other features, a casing for defining a transfer chamber under a vacuum state, a guide rail substantially horizontally installed inside the transfer chamber under the

vacuum state, and a moving body movably installed on the guide rail. The Miller reference fails to disclose or even suggest a guide rail substantially horizontally installed inside the transfer chamber under the vacuum state, as recited in Claims 10 and 14.

The Miller reference describes an apparatus for transporting material that includes a chamber, guide rails affixed to an outer surface of the chamber, and material transporters including motorized vehicles positioned outside the chamber. (See Abstract.) More specifically, the Miller reference describes a wafer transport system (10) that includes a sealed chamber (22) with guide tracks (24) that are provided that on the top of the chamber (22) and guide wafer transporters (26). (See column 4, lines 20-40.) As is clearly evident from a review of Figure 2 of the Miller reference, the guide tracks (24) are not provided inside the sealed chamber (22, 50), but rather are provided on a top outside surface, and therefore are outside of sealed chamber and not under a vacuum state. Therefore, the Miller reference clearly fails to disclose or even suggest a guide rail substantially horizontally installed inside the transfer chamber under the vacuum state, as recited in Claims 10 and 14.

Accordingly, the Applicants respectfully request the withdrawal of the anticipation rejection of independent Claims 10 and 14, as well as the anticipation rejections of Claims 15-18, 20, 21, and 23, which depend from Claim 14.

Additionally, the Applicants note that Claim 17 recites that the moving body includes a stopper for restricting the lowest position of the supporting member and moves while the supporting member is at the lowest position thereof. However, the Miller reference describe that “the levitation control circuit 120 reduces the levitation force on the carrier, allowing the carrier to move downward until the alignment pins 116 are inserted into the alignment holes

and the carrier is docked.” (Column 7, lines 48-52.) In view of the above description, while the stopper (alignment pins 116) of the Miller reference is placed at the lowest position of the supporting member, the moving body of the Miller reference cannot be moved because the stopper is inserted into the alignment hole and the moving part (carrier) is docked. Therefore, the additional features of Claim 17 are not disclosed or even suggested in the Miller reference.

Additionally, the Applicants note that Claim 18 recites that the elevation mechanism includes: a push rod extending through a bottom portion of the casing and making a contact with the supporting member; a vertically driving unit disposed in the outside of the casing, for raising and lowering the push rod; and a sealing unit for airtightly sealing a gap between the push rod and the casing. The Miller reference only describes a mechanism using the levitation force, and does not disclose or even suggest an elevation mechanism including a push rod extending through a bottom portion of the casing and making a contact with the supporting member and a sealing unit for airtightly sealing a gap between the push rod and the casing. Therefore, the additional features of Claim 18 are not disclosed or even suggested in the Miller reference.

Additionally, the Applicants note that Claim 23 recites that a partition wall has a slit for allowing the supporting member of the moving part to move therethrough. According to Figures 6-8 of the Miller reference, the partition wall (top cover 66) cannot have a slit because it should keep the chamber sealed. Therefore, the additional features of Claim 23 are not disclosed or even suggested in the Miller reference.

Claims 11-13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Narishima (JP 2000-150618). For the reasons discussed below, the Applicants request the withdrawal of the obviousness rejection.

The basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. The Applicants submit that a *prima facie* case of obviousness cannot be established in the present case because the cited references, either when taken singularly or in combination, do not teach or suggest all of the claim limitations, and there is no suggestion or motivation to modify the references to arrive at the claimed invention.

Independent Claims 11 and 13 each advantageously recite a processing system comprising, among other features, (a) a main transfer mechanism including a casing for defining a main transfer mechanism under a vacuum state, a guide rail substantially horizontally installed inside the transfer chamber under the vacuum state, and a moving body movably installed on the guide rail, and (b) an auxiliary transfer mechanism including a casing for defining an auxiliary transfer chamber under a vacuum state which selectively communicates with the main transfer chamber, and an auxiliary transfer unit installed in the auxiliary transfer chamber.

For the reasons discussed above with respect to Claims 10 and 14, the Applicants

submit that the Miller reference fails to disclose or suggest a guide rail substantially horizontally installed inside the transfer chamber under the vacuum state, as is also recited in Claims 11 and 13.

Furthermore, the Narishima reference does not supplement the deficiency in the teachings of the Miller reference noted above. The Narishima reference does not appear to be cited for, and does not appear to disclose or suggest a guide rail substantially horizontally installed inside the transfer chamber under the vacuum state, as is also recited in Claims 11 and 13. Thus, for at least this reason, the Miller reference and the Narishima reference, either when taken singularly or in combination, do not teach or suggest all of the limitations recited in Claims 11 and 13, and therefore a *prima facie* case of obviousness cannot be established based on the combination of these references.

Furthermore, the Official Action appears to cite the Narishima reference for a teaching of all of the features of Claim 11 other than the main transfer mechanism, for example, including an auxiliary transfer mechanism. However, the Applicants submit that the Narishima reference only depicts the transfer chamber (16) being in communication with an intermediate path chamber (38) and a processing chamber, but does not disclose or even suggest an auxiliary transfer mechanism including a casing for defining an auxiliary transfer chamber under a vacuum state which selectively communicates with a main transfer chamber, as recited in Claims 11 and 13. Page 4 of the Official Action also acknowledges that the Miller reference does not disclose such a feature.

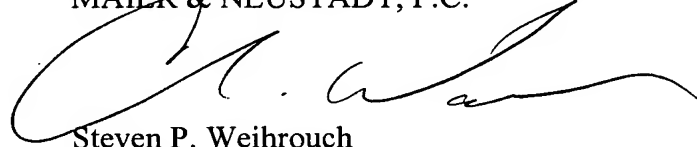
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Accordingly, the Applicants respectfully request the withdrawal of the obviousness rejection of independent Claims 11 and 13, as well as the obviousness rejection of Claim 12, which depends from Claim 11.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

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